

Applicant : Terence S. Dowling, et al.  
Serial No. : 09/378,227  
Filed : August 19, 1999  
Page : 17 of 22

Attorney's Docket No.: 07844-322001 / P296

### REMARKS

Claims 1-63 are pending in this application. Claims 1, 3, 11, 17, 46 and 49 are amended. Claim 61 has been cancelled. Claims 64-72 have been added. No new matter has been added. A marked up version of the changes made by the current amendment is attached. Reconsideration of the rejected claims is respectfully requested in view of these amendments and the following remarks.

#### **1. Interview Summary**

Applicant thanks Examiner Bell for the courtesy of an interview conducted on December 11, 2003, which was attended by Examiner Bell and the Applicants attorney Mark Kirkland. Claims 1, and 17 were discussed along with the features indicated by the Examiner in the Kumada, Simpson, and Hill references. No agreement was reached.

#### **2. Response to Rejections under Section 103**

Claims 1, 2, 11, 17, and 18, 52, 56, 57, and 60 stand rejected under 35 U.S.C. Section 102(b) as being anticipated by U.S. Patent No. 5,563,725 to Kumada et al. ("Kumada") and further in view of "Mastering Wordperfect 5.1 & 5.2 for Windows," by Simpson (Simpson). Applicant respectfully traverses the rejection.

##### **a. Claims 1, 2, 11, 52, 56, 57, and 60**

As amended, claim 1 recites a method for use in a display system operable to display each of a plurality of pixels at a visual output intensity relative to an output display device according to a corresponding pixel input value. The method comprises determining a set of device specific pixel input values, based on user input, that will cause the display system to display a corresponding set of target visual output intensities relative to the output display device, where the output display device has one or more color planes. The determining step includes displaying a control region and a reference region on the output display device, evaluating the control region and reference region for each color plane of the display device, and

Applicant : Terence S. Dowling, et al.  
Serial No. : 09/378,227  
Filed : August 19, 1999  
Page : 18 of 22

Attorney's Docket No.: 07844-322001 / P296

adjusting a common pixel input value for the control pixels defining the control region until a match is achieved between an appearance of the reference region and an appearance of the control region for each color plane such that the target visual output intensities are achieved.

Kumada neither discloses nor suggests displaying a control region on the output display device, and adjusting common pixel input values for control pixels defining a control region until target visual output intensities are achieved. Kumada discloses obtaining monitor model information from a monitor controller (column 10, line 19), and using the monitor model information to output chromatic characteristic information of the monitor to a printer controller for the execution of a color correction process (column 13, lines 39-41). In Kumada, the host executes a process to fetch a monitor ID sequence representing a model of a monitor connected to a monitor controller (column 13, lines 9-10). The monitor ID sequences are used to obtain color correction coefficients for the monitor (column 13, lines 24-34). The monitor ID sequence is input to the monitor controller using a dip switch (column 10, lines 60-62).

Simpson neither discloses nor suggests displaying a control region and a reference region on the output display device, and adjusting common pixel input values for the control pixels defining the control region until a match is achieved between the reference region and the control region. Simpson teaches changing print color of text by selecting a print color using a text color dialog box. The selected print color is selected from a set of predefined colors displayed in the dialog box, or from a spectrum that is displayed in the dialog box. The dialog box includes a Print Color and Screen Color box that purport to display how the selected color will look when printed on the screen.

Claim 1 includes a determining step that allows target visual output intensities to be achieved. A set of device-specific pixel input values are determined, based on user input, that cause the target visual output intensities to be displayed on the output display device. This method can be used to achieve target visual intensities for the output display device if the color characteristics of the output display device change over time. Simpson does not teach a method for achieving a target visual intensity on the output display device.

Applicant : Terence S. Dowling, et al.  
Serial No. : 09/378,227  
Filed : August 19, 1999  
Page : 19 of 22

Attorney's Docket No.: 07844-322001 / P296

The Applicant respectfully submits that neither Kumada nor Simpson disclose or suggest, individually or in combination, displaying a control region and a reference region, and adjusting a common pixel input value for control pixels defining the control region until a match is achieved between an appearance of the reference region and an appearance of the control region for each color plane, such that target visual output intensities are achieved. Claim 1 is therefore allowable. Claims 2, 11, 52, 56, 57, and 60 depend either directly or indirectly from Claim 1, and are therefore allowable for at least the same reasons.

**b. Claim 17, and 18**

As amended, Claim 17 recites a method for determining device-specific information for pixels to obtain an optimal display of fine structure monochrome images on an output display device. The method includes displaying a plurality of regions in a display device, the displaying step including selecting a pattern for each region of the plurality of regions. The method also includes determining a device-specific sub-pixel geometry from a plurality of possible sub-pixel geometries for all pixels of the output display device. The device-specific sub-pixel geometry is determined based on user input selecting a region of the plurality of regions, where each pixel includes a plurality of sub-pixels each defining a color component and a sub-pixel position associated with a given pixel.

Applicant respectfully submits that neither Kumada nor Simpson disclose or suggest a method of determining a device-specific sub-pixel geometry from a plurality of possible sub-pixel geometries. In addition, Kumada neither discloses nor suggests the use of user input in the form of selecting a region of the plurality of regions displayed on the output display device to determine the sub-pixel geometry of the output display device. Kumada discloses obtaining monitor model information from a monitor controller, and using the monitor model information to output the chromatic characteristic information of the monitor to the printer. Simpson discloses displaying a Text Color box that displays the appearance of a selected text color on the output display device. Neither Kumada nor Simpson, individually or in combination, disclose or suggest a method for determining a device-specific sub-pixel geometry from a plurality of

Applicant : Terence S. Dowling, et al.  
Serial No. : 09/378,227  
Filed : August 19, 1999  
Page : 20 of 22

Attorney's Docket No.: 07844-322001 / P296

possible sub-pixel geometries. Claim 17 is therefore allowable. Claim 18 depends from claim 17 and is therefore allowable for at least the same reason.

**c. Claims 42-51**

Claims 42-51 stand rejected under 35 U.S.C. Section 103(a) as being unpatentable over Kumada and Simpson, and further in view of U.S. Patent No. 6,278,434 to Hill et al. (Hill).

**i. Claims 42-45**

Claims 42-45 depend directly from claim 17, and therefore include all the limitations of that claim. Applicant submits that these claims are allowable for at least the reasons discussed above in the context of claim 17.

**ii. Claims 46-48**

As amended claim 46 recites a method for use in a display system operable to display each of a plurality of pixels at a visual output intensity relative to a liquid crystal display (LCD) device according to a corresponding pixel input value. The method determines device-specific information for pixels to obtain an optimal display of images on a liquid crystal display (LCD) device, the LCD device having one or more color planes. The method comprises determining a set of device specific pixel input values, based on user input, that will cause the display system to display a corresponding set of target visual output intensities relative to the liquid crystal display (LCD) device. The determining step includes displaying a control region and a reference region on the liquid crystal display (LCD) device, and adjusting a common pixel input value for control pixels defining the control region until a match is achieved between an appearance of the reference region and an appearance of the control region for each color plane, such that target visual output intensities are achieved.

Hill discloses a method of displaying an image at an increased resolution by treating the sub-pixel components independently. Kumada, Simpson, and Hill, individually or in combination, do not disclose or suggest displaying a control region and a reference on the

Applicant : Terence S. Dowling, et al.  
Serial No. : 09/378,227  
Filed : August 19, 1999  
Page : 21 of 22

Attorney's Docket No.: 07844-322001 / P296

display device, and adjusting a common pixel input value for the control pixels defining the control region until a match is achieved between an appearance of the reference region and an appearance of the control region, thereby achieving target visual output intensities. Because Kumada, Simpson, and Hill, alone or in combination, fail to disclose or suggest at least these limitations of claim 46, no *prima facie* case of obviousness has been established, and claim 46 is allowable. Claims 47 and 48 depend directly or indirectly from claim 46 and are therefore allowable for at least the same reasons.

**iii. Claim 49-51**

As amended, claim 49 recites a method for use in a display system operable to display a plurality of pixels. The method determines device-specific information for pixels to obtain an optimal display of images on a liquid crystal display (LCD) device. The method displays a plurality of regions on the liquid crystal display (LCD) device, the displaying step including selecting a pattern for each region of the plurality of regions. The method includes determining a device-specific sub-pixel geometry from a plurality of possible sub-pixel geometries for all pixels of the liquid crystal display (LCD) device, based on user input, where each pixel includes a plurality of sub-pixels each defining a color component and a sub-pixel position associated with a given pixel.

Kumada, Simpson, and Hill do not disclose displaying a plurality of regions on the liquid crystal display (LCD) device, including selecting a pattern for each region. In addition Kumada and Hill do not disclose or suggest the use of user input in determining a device-specific sub-pixel geometry from a plurality of possible sub-pixel geometries where each pixel includes a plurality of sub-pixels each defining a color component and a sub-pixel position associated with a given pixel. Because Kumada, Simpson, and Hill, alone or in combination, fail to disclose or suggest at least these limitations of claim 49, no *prima facie* case of obviousness has been established, and claim 49 is allowable. Claims 50 and 51 depend directly or indirectly from claim 49 and are therefore allowable for at least the same reasons.

Applicant : Terence S. Dowling, et al.  
Serial No. : 09/378,227  
Filed : August 19, 1999  
Page : 22 of 22

Attorney's Docket No.: 07844-322001 / P296

### 3. Allowable Subject Matter

Applicant wishes to thank the Examiner for allowing Claims 3-10, 12-16, 62 and 63. In addition, Applicant wishes to thank the Examiner for indicating that Claims 19-41, 53-55, 58, 59, and 61 were merely objected to as being dependent upon a rejected base claim, and otherwise were in allowable form. Claims 19-41 depend directly or indirectly from Claim 17. Claims 53-55, 58, and 59 depend directly or indirectly from Claim 1. Claims 1 and 17 have been amended. Claim 61 has been cancelled. The Applicant believes that the Examiner's objections are rendered moot in view of these amendments.

Respectfully submitted,

Date: \_\_\_\_\_

12/12/03

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